

Amendments to the Claims

Please amend claims 1-17 as follows:

Claims 1-9 and 18 (withdrawn)

Claims 10-12, 15-17 (currently amended)

Claim 13 (cancelled)

Claim 14 (original)

10. A method for protecting ~~a~~ porcine animal against disease caused by *Mycoplasma hyopneumoniae* comprising the step of administering to said porcine animal a vaccine composition which comprises

an immunizing amount of a *Mycoplasma hyopneumoniae* bacterin;

an adjuvant mixture comprising a polyacrylic acid polymer and a mixture of metabolizable oil and a polyoxyethylene-polypropylene block copolymer;

a ~~pharmaceutical~~pharmaceutically acceptable carrier which vaccine composition, after a single administration elicits protective immunity from *Mycoplasma hyopneumoniae* infection; and

wherein the step of administering to said porcine animal is done by a method chosen from the group consisting of, intramuscular injection, subcutaneous injection, oral administration and nasal administration.

11. The method of claim 10, wherein the immunizing amount of said ~~bacteria~~bacterin is about 1×10^8 to 3×10^{11} *Mycoplasma hyopneumoniae* DNA Cell equivalents, (MHDCE/mL).

12. The method according to claim 11 wherein the immunizing amount of said ~~bacteria~~bacterin is about 1×10^9 to 3×10^9 MHDCE/mL.

14. The method of claim 10, wherein the adjuvant mixture consists of a polyacrylic acid polymer and a mixture of metabolizable oil that comprises one or more terpene hydrocarbons and a polyoxyethylene-polypropylene block copolymer present in a final concentration of about 1-25% v/v.

15. The method of claim 14, wherein the polyacrylic acid polymer of the adjuvant mixture is ~~Carbopol~~CARBOPOL.

16. The method of claim 14, wherein the metabolizable oil of the adjuvant mixture is a terpene hydrocarbon selected from the group consisting of- squalene and squalane.

17. The method of any claims 10-16, further comprising coadministering at least one additional bacterin selected from the group consisting of ~~*Haemophilus*~~ *Haemophilus* ~~*parasuis*~~; *Pasteurella multocida*~~*multicida*~~; ~~*Streptococcus*~~ *Streptococcus* ~~*suis*~~; *Actinobacillus pleuropneumoniae*; *Bordetella bronchiseptica*; *Salmonella choleraesuis*; and *leptospira* ~~bacteria~~.